

Thomas B. Friedman

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Education	
1962-1966	Undergraduate education: University of Michigan, BS, Zoology
1966-1971	Graduate education: Department of Zoology, University of Michigan, PhD
1969-1971	NIH Predoctoral Genetics Training Grant from Dr. James V. Neel, Department of Human Genetics, mentor: Dr. T. M. Rizki, Department of Zoology, University of Michigan
Current Positions	
1996 to present	Chief, Laboratory of Molecular Genetics, and Chief, Section on Human Genetics, National Institute on Deafness and Other Communication Disorders, National Institutes of Health
Peer Reviewed Publications: (last three years)	
120.	Ahmed ZM [#] , Masmoudi S [#] , Kalay E [#] , Belyantseva IA, Mosrati MA, Collin RWJ, Riazuddin S, Hmani-Aifa M, Venselaar H, Kawar MN, Abdelaziz T, van der Zwaag B, Khan SY, Ayadi L, Riazuddin SA, Morell RJ, Griffith AJ, Charfedine I, Çaylan R, Oostrik J, Karaguzel A, Abdelmonem G, Riazuddin S, Friedman TB*, Ayadi H*, Kremer H* (2008) Mutations of <i>LRTOMT</i> , a fusion gene with alternative reading frames, cause nonsyndromic deafness in humans. [#] co-first authors; *co-communicating authors. <i>Nature Genetics</i> 40: 1335-1340.
121.	Ahmed ZM, Kjellstrom S, Haywood-Watson II RJL, Bush RA, Hampton LL, Battey JF, Riazuddin S, Frolovkov G, Sieving PA, Friedman TB (2008) Double homozygous waltzer and Ames waltzer mice provide no evidence of retinal degeneration. <i>Molecular Vision</i> 14: 2227-2236.

122. Ahmed ZM, Riazuddin S, Khan SN, Friedman PL, Riazuddin S, Friedman TB (2009) USH1H, a novel locus for type I Usher syndrome, maps to chromosome 15q22-23. *Clinical Genetics* 75: 86-91.
123. Choi BY, Ahmed ZM, Riazuddin S, Bhinder MA, Shahzad M, Husnain T, Riazuddin S, Griffith AJ, Friedman TB (2009) Identities and frequencies of mutations of the otoferlin gene (*OTOF*) causing DFNB9 deafness in Pakistan. *Clinical Genetics* 75: 237-243.
124. Waryah AM, Rehman A, Ahmed ZM, Bashir Z, Khan SY, Zafar AU, Riazuddin S, Friedman TB, Riazuddin S (2009) *DFNB74*, a novel autosomal recessive nonsyndromic hearing impairment locus on chromosome 12q14.2-q15. *Clinical Genetics* 76:270-275.
125. Anwar S, Riazuddin S, Ahmed ZM, Tasneem S, Ateeq-ul-Jaleel, Khan SY, Griffith AJ, Friedman TB, Riazuddin S (2009) *SLC26A4* mutation spectrum associated with DFNB4 deafness and Pendred syndrome in Pakistan. *Journal of Human Genetics* 54:266-270.
126. Belyantseva IA*, Perrin BJ*, Sonnemann K*, Zhu M, Stepanyan R, McGee J, Frolenkov GI, Walsh E, Friderici KH, Friedman TB, Ervasti JM (2009) γ -Actin is required for cytoskeletal maintenance but not development. *Proceedings of the National Academy of Sciences* 106: 9703-9708 * co-first authors.
127. Schultz J, Khan S, Ahmed Z, Riazuddin S, Waryah AM, Chhatre D, Starost M, Ploplis B, Buckley S, Velasquez D, Kabra M, Lee K, Hassan M, Ali G, Ansar M, Ghosh M, Wilcox E, Ahmad W, Merlini G, Leal S, Riazuddin S, Friedman TB, Morell RJ (2009) Noncoding Mutations of HGF are associated with nonsyndromic hearing loss, DFNB39. *The American Journal of Human Genetics* 85: 25-39.
128. Riazuddin S*, Anwar S*, Fischer M, Ahmed ZM, Khan SY, Janssen AGH, Zafar AU, Scholl U, Husnain T, Belyantseva IA, Friedman PL, Riazuddin S, Friedman TB, Fahlke C (2009) Molecular basis of DFNB73: mutations of *BSND* can cause nonsyndromic deafness or Bartter syndrome. *The American Journal of Human Genetics* 85: 273-280.
129. Lagziel A, Overlack N, Bernstein SL, Morell RJ, Wolfrum UY, Friedman TB (2009) Expression of cadherin 23 isoforms is not conserved: implications for a mouse model of Usher syndrome type 1D. *Molecular Vision* 15: 1843-1857.
130. Peng AW, Belyantseva IA, Hsu P, Friedman TB, Heller S (2009) Twinfilin 2 regulates actin filament lengths in cochlear stereocilia. *Journal of Neuroscience* 29(48):15083-15088.
131. Khan SY, Riazuddin S, Shahzad M, Ahmed N, Zafar U, Rehman AU, Morell RJ, Griffith AJ, Ahmed ZM, Riazuddin S, Friedman TB. (2010) *DFNB79*: reincarnation of a nonsyndromic deafness locus on chromosome 9q34.3. *European Journal of Human Genetics* 18: 125-129.

132. Odeh H, Hunker KL, Belyantseva IA, Azaiez H, Avenarius MR, Zheng L, Peters LM, Gagnon L, Hagiwara N, Skynner M, Brilliant MH, Allen N, Riazuddin S, Johnson KR, Raphael Y, Najmabadi H, Friedman TB, Bartles JR, Smith RJH, and Kohrman DC (2010) Mutations in *Grxcr1* are the basis for inner ear dysfunction in the pirouette mouse. *The American Journal of Human Genetics* 86: 148-160.
133. Rehman, AU, Morell, RJ, Khan SY, Belyantseva IA, Boger ET, Shahzad M, Ahmed ZA, Riazuddin S, Khan SN, Friedman TB (2010) Targeted capture and next-generation sequencing identifies *C9orf75*, encoding TAPERIN, as the mutated gene in nonsyndromic deafness DFNB79. *The American Journal of Human Genetics* 86: 378-388.
134. Kitajiri S-i Sakamoto T, Belyantseva IA, Goodyear RJ, Stepanyan R, Fujiwara I, Bird JE, Riazuddin S, Riazuddin S, Ahmed ZM, Hinshaw JE, Sellers J, Bartles JR, Hammer III JA, Richardson GP, Griffith AJ, Frolenkov GI, Friedman TB (2010) Actin-bundling protein TRIOBP forms resilient rootlets of hair cell stereocilia essential for hearing. *CELL* 141: 786-798.
135. Hertzano R, Puligilla C, Chan SL, Timothy C, Depireux DA, Ahmed Z, Wolf J, Eisenman DJ, Friedman TB, Riazuddin S, Kelley MW, Strome SE (2010) CD44 is a marker for the outer pillar cell in the early post-natal mouse inner ear. *Journal of the association of Research Otolaryngology* 11:407-418.
136. Ahmed ZM, Rizwan Y, Lee BC, Khan SN, Lee S, Kwanghyuk L, Husnain T, Rehman AU, Bonneux S, Ahamd W, Leal SM, Gladyshev VN, Belyantseva IA, Van Camp G, Riazuddin, S, Friedman TB, Riazuddin S (2011) Functional Null Mutations of *MSRB3* Encoding Methionine Sulfoxide Reductase are associated with human deafness DFNB74. *The American Journal of Human Genetics* 88:18-29.
137. Borck G, Rehman AU, Lee K, Pogoda, H-M, Kakar N, von Ameln S, Grillet N, Hildebrand MS, Ahmed ZM, Nürnberg G, Ansar M, Basit S, Javed Q., Morell RJ, Nasreen NA, Shearer AE, Ahmad A, Kahrizi K, Shaikh RS, RA A, Khan SN, Goebel I, Meyer NC, Kimberling WJ, Webster JA, Stephan D, Schiller M, Bahlo M, Najmabadi H, Gillespie PG, Nürnberg P, Wollnik B, Riazuddin S, Smith RJH, Ahmad W, Müller U, Hammerschmidt M, Friedman TB, Riazuddin S, Leal SM, Ahmad J, Kubisch C (2011) Loss-of-Function Mutations of *ILDR1* Cause Autosomal-Recessive Hearing Impairment DFNB42. *The American Journal of Human Genetics* 88: 127-137.
138. Riazuddin S, Ahmed ZM, Hegde, RS, Khan SN, Nasir I, Shaukat U, Riazuddin S, Butman JA, Griffith AJ, Friedman, TB, Choi BY (2011) Variable expressivity of *FGF3* mutations associated with deafness and LAMM syndrome. *BMC Medical Genetics* 12: 21-31.